

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

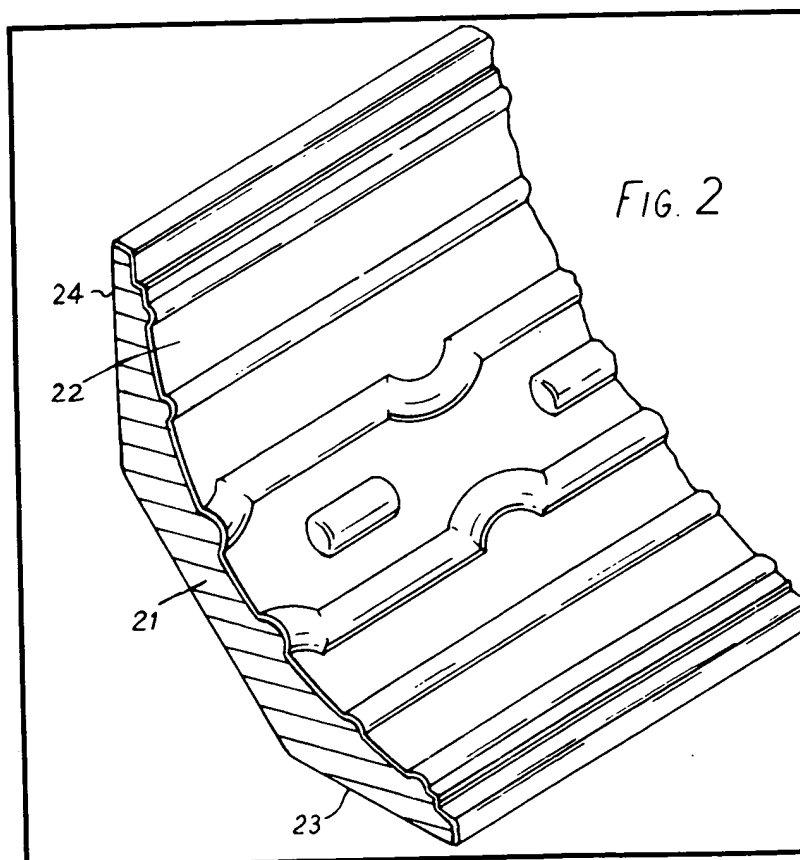
**THIS PAGE BLANK (USPTO)**

**UK Patent Application** (12) **GB** (19) (11) **2 031 478** /

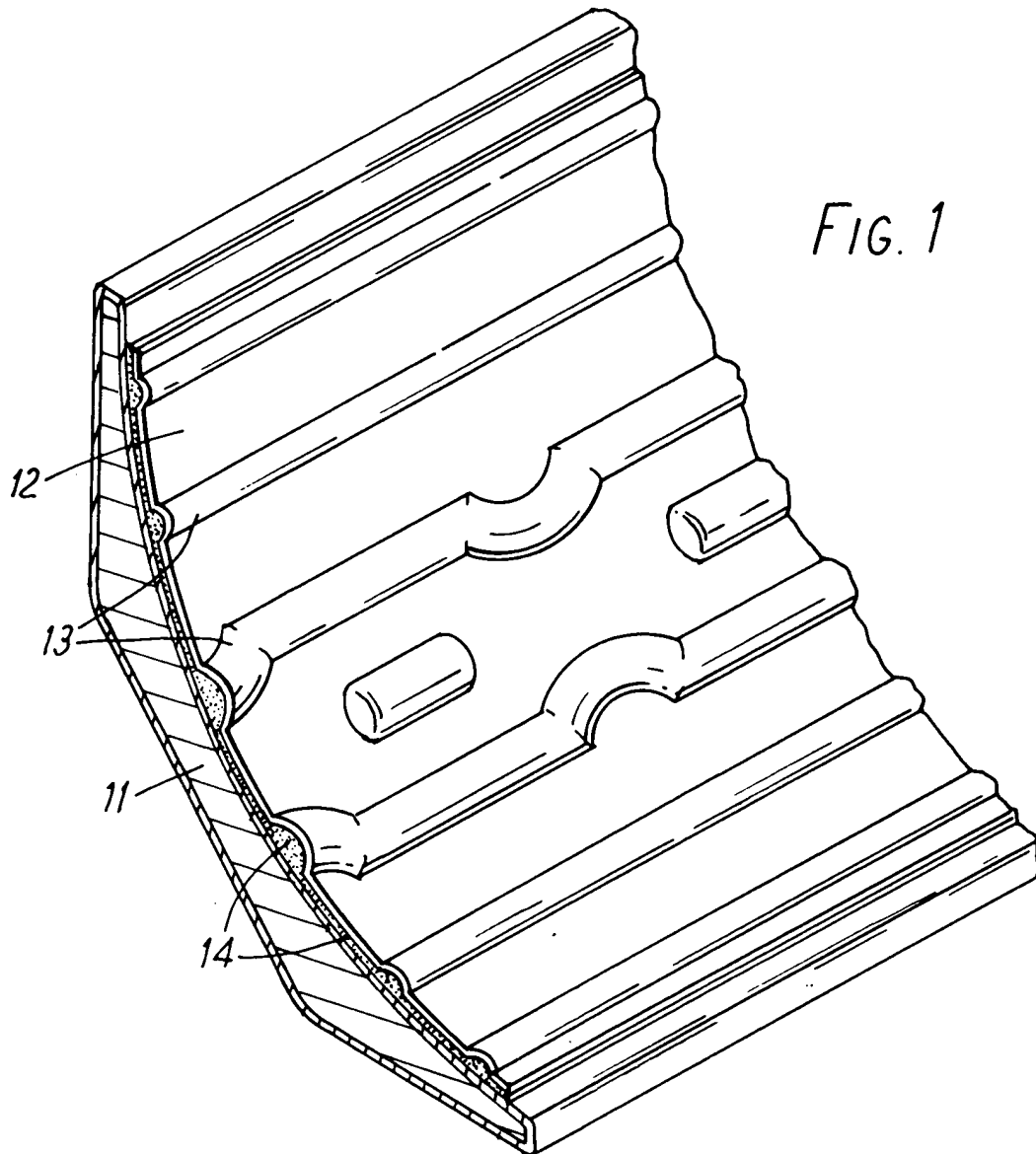
- (21) Application No **7927752**  
 (22) Date of filing  
**9 Aug 1979**  
 (23) Claims filed  
**9 Aug 1979**  
 (30) Priority data  
 (31) **1850078**  
**78/49683**  
 (32) **9 May 1978**  
**21 Dec 1978**  
 (33) **United Kingdom (GB)**  
 (43) Application published  
**23 Apr 1980**  
 (51) **INT CL<sup>3</sup> E04F 19/02**  
 (52) Domestic classification  
**E1B 12B1**  
 (56) Documents cited  
**GB 1443194**  
**GB 1306608**  
**GB 1260215**  
**GB 1258613**  
**GB 1127761**  
**GB 1108041**  
**GB 933781**  
**GB 922135**  
**GB 851607**  
**GB 836452**  
**GB 314606**  
 (58) Field of search  
**B6G**  
**E1B**  
 (71) Applicant  
**Rhoden Partners Limited**  
**231 The Vale**  
**Acton**  
**London W3 7QU**  
 (72) Inventors  
**Alan John Butcher**  
**Geoffrey Sandle**  
**Thompson**  
**Gunter Wittenberg**  
 (74) Agents  
**Reddie & Grose**

**(54) Covings and other decorative mouldings**

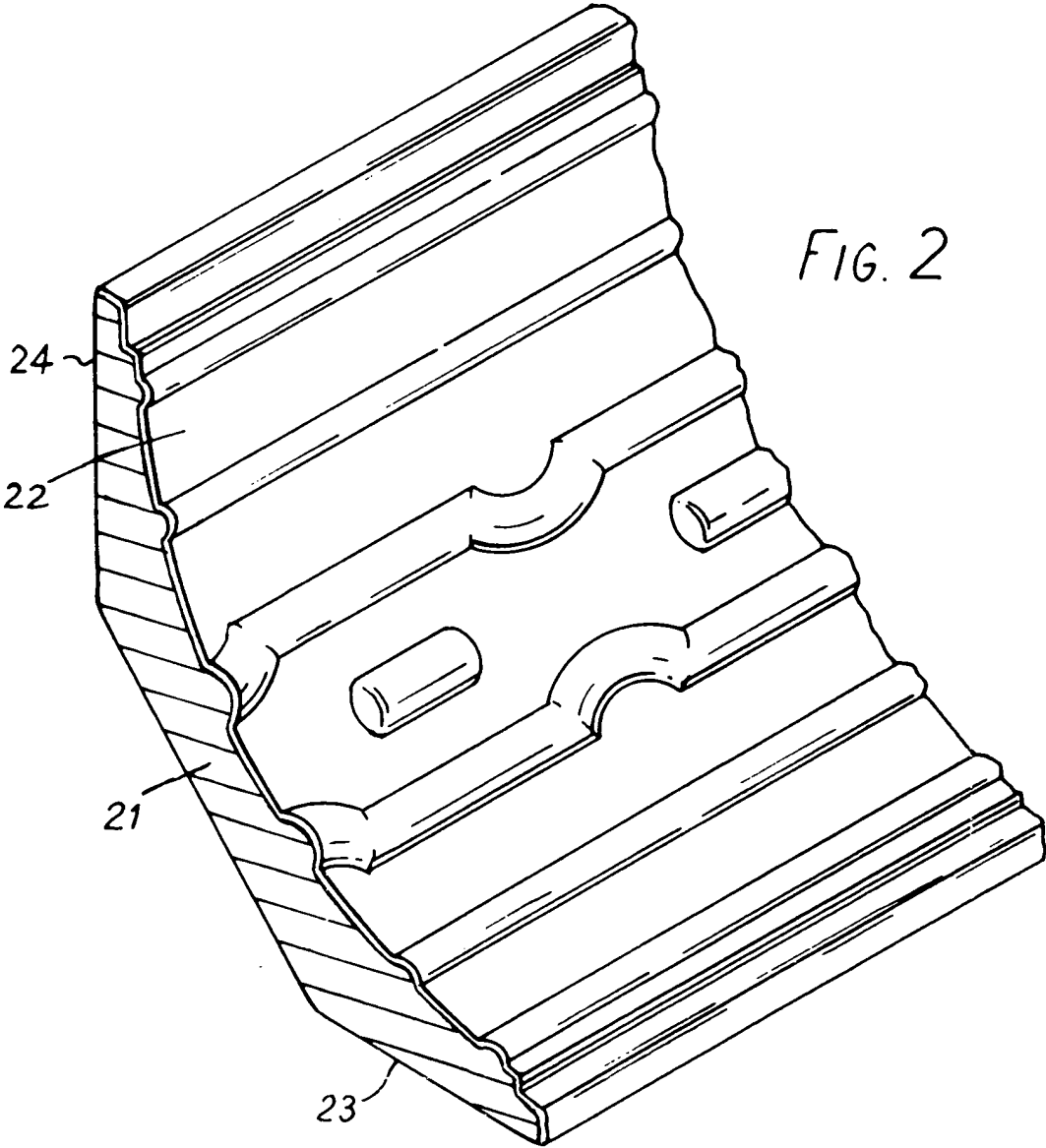
(57) This invention relates to a decorative moulding preferably a coving or a ceiling medallion for attachment to a wall and/or a ceiling having a decorative surface formed of a sheet or film 22 of deformable material preferably plastics or paper, which has been deformed to provide thereon a pattern of raised and depressed areas, and a support material preferably plaster or foamed plastics having at least one plane surface 23 or 24 for co-operation with a plane surface or plurality of plane surfaces on which the decorative feature is to be mounted with the decorative surface thereof visible and with the support material invisible.



**THIS PAGE BLANK (USPTO)**



**THIS PAGE BLANK (USPTO)**



**THIS PAGE BLANK (USPTO)**



## SPECIFICATION

### Building materials

- 5 This invention relates to building materials and especially to decorative architectural features such as enriched coves or cornices, ceiling centres, panel mouldings, medallions and the like for attachment to for example
- 10 internal or external walls and to ceilings.
- Decorative building features of this type have previously been made by moulding using plaster reinforced with a web of fibrous material. Such mouldings, however, are brittle
- 15 and easily damaged and are difficult to store and transport without damage and require careful handling during installation.
- This invention provides a decorative building feature for attachment to a wall and/or a
- 20 ceiling having a decorative surface formed of a sheet or film of deformable material, which has been deformed to provide thereon a pattern of raised and depressed areas, and a support material having at least one plane
- 25 surface for co-operation with a plane surface or plurality of plane surfaces on which the decorative feature is to be mounted with the decorative surface thereof visible and with the support material invisible.
- 30 The decorative building feature of the invention may be for example a decorative cove or cornice, in which case, the support material will be provided with two plane surfaces, at right angles to each other so that one surface
- 35 can be attached to the ceiling and the other surface attached to the adjoining wall of a room, or it may be a panel moulding, a medallion or ceiling centre, in which case the support material will have a single plane surface allowing it to be attached to the surface
- 40 of a wall or a ceiling.
- The sheet or film of deformable material which forms the decorative surface of the building feature may be of any deformable
- 45 material such as a plastics material or paper which can be deformed by embossing, vacuum forming, or a like operation so as to produce a surface having a pattern of raised and depressed areas. The support material will
- 50 be generally such that it fills the reverse side of the raised portions of the pattern thereby providing support and resistance to damage by indentation of such portions of the decorative surface.
- 55 The decorative surface may, when the building feature is a cover or cornice, comprise a film or sheet of embossed or otherwise deformed material which is adhered or otherwise attached to a preformed cove or cornice
- 60 such as, for example, a conventional plaster cove or a cove of foamed polystyrene. In such a case the decorative surface may be clipped over the edges of such a cove or cornice or otherwise releasably attached thereto or,
- 65 preferably, will be adhered to the preformed

- cover with the intermediary of an adhesive which fills the reverse side of the raised areas of the decorative surface. In those cases where the film or sheet is a plastics material it is preferably given a surface treatment, such as a corona treatment, to enable it to be finished, for example by painting, to match the decoration of the room in which it is to be used. The decorative building features of the
- 70 invention preferably comprise a vacuum formed or otherwise embossed film or sheet of thermo-plastic material, such as, for example, polyvinyl chloride, and a backing of a foamed plastics material, such as, for example,
- 75 foamed polyurethane or expanded polystyrene which is applied directly to the back of the thermo-plastics sheet.

- One method of making such a decorative building feature in a simple two stage operation comprises subjecting strips of, for example, polyvinyl chloride sheet to a vacuum forming operation, placing the strips in a mould and injecting into the mould a foamable polyurethane forming composition.
- 85 Alternatively, it is possible to form the decorative surface by blow moulding a tube of thermo-plastics material to produce a decorative surface over one part of the surface of the tube and to form the required plane surfaces for co-operation with the surfaces on which the decorative feature is to be mounted on other parts of the tube and to fill the so formed decorative tube with a support material, such as, for example, foamed or expanded
- 90 plastics material or with plaster or other settable material.

The invention will now be described by way of example with reference to the accompanying drawings, in which:

- 105 *Figure 1* is a perspective view of a decorative cornice embodying the invention;
- Figure 2* is a perspective view of a second form of decorative cornice embodying the invention.
- 110 As shown in Fig. 1 the cornice comprises a paper covered cove 11, for example that sold under the Trade Mark "GYPROC" having adhered to the concave face thereof a strip of paper 12 or sheet plastics material having
- 115 deeply embossed portions 13 upstanding from the surface thereof. The hollows under the embossings 13 are filled to provide stability and to make handling and working the cornice easier.
- 120 The filling is provided by a plaster 14 which is applied to the rear of the strip 12 in sufficient quantity to pack the hollows. The plaster 14 is also used to stick the paper 12 to the concave surface.
- 125 Thus, to manufacture the cornice a strip of deeply embossed paper or plastics material 12, cut to the correct width, is curve to conform with the curvature of the cover 11.
- To the convex surface of the strip 12 is
- 130 applied a coating of plaster 14 sufficient to fill

the hollows 13 of the embossing. In addition, a thin coating of plaster is left on the unembossed portion of the surface of the strip to act as an adhesive, and the strip is then

5 applied to the concave surface of the cove 11.

In those cases where it is desired to use a filled embossed film or sheet to provide the decorative surface of the cornice it may be possible to dispense with the film or sheet

10 and simply adhere moulded or extruded decorative facings to the pre-formed cove. Such moulded or extruded decorative facings might, for example, be formed from plastics material such as foamed polystyrene.

15 It may also be desirable that the decorative surface of the cornice be a plaster surface. In such a case the embossed film or sheet may simply serve as a mould for, for example, a plaster filling and be stripped off after the filling has adhered to the pre-formed cove.

20 With reference to Fig. 2, a second form of the invention comprises an embossed or vacuum formed plastics, for example, PVC, facing layer 22 and a support layer 21 of foamed plastics material for example, foamed polyurethane.

The support layer 21 is formed with plane surfaces 23 and 24 at right angles to each other.

30 This form of cornice may be formed by placing the facing layer of embossed plastics material in a mould and then causing a foamable plastics material to foam in the mould thereby filling the mould and adhering the  
35 foamed material to the back surfaces of the facing layer.

#### CLAIMS

1. A decorative building feature for attachment to a wall and/or a ceiling having a decorative surface formed of a sheet or film of deformable material, which has been deformed to provide thereon a pattern of raised and depressed areas, and a support material  
45 having at least one plane surface for co-operation with a plane surface or plurality of plane surfaces on which the decorative feature is to be mounted with the decorative surface thereof visible and with the support material  
50 invisible.

2. A decorative building feature as claimed in claim 1 in the form of a decorative cove or cornice and the support material is provided with two plane surfaces at right  
55 angles to each other.

3. A decorative building feature as claimed in claim 1 in the form of a panel moulding, a medallion or ceiling centre and the support material has a single plane surface.  
60

4. A decorative building feature as claimed in any one of claims 1 to 3, wherein the sheet or film of deformable material is a sheet or film of a plastics material or paper.

65 5. A decorative building feature as

claimed in any one of claims 1 to 4, wherein the support material fills the reverse side of the raised portions of the pattern.

6. A decorative building feature as claimed in any one of claims 2 to 5, wherein the decorative surface comprises a film or sheet of embossed or otherwise deformed material which is adhered or otherwise attached to a pre-formed cove or cornice.

75 7. A decorative building feature as claimed in claim 6, wherein the decorative surface is such that it can be clipped over the edges of a pre-formed cove or cornice.

8. A decorative building feature as claimed in any one of claims 1 to 5, comprising as the decorative surface a vacuum formed or otherwise embossed film or sheet of thermo-plastic material and a firmly adherent backing of a foamed plastics material.

85 9. A decorative building feature as claimed in claim 8, wherein the decorative surface is produced from a film or sheet of polyvinyl chloride and the backing material is a foamed polyurethane or expanded polystyrene.

10. A decorative building feature as claimed in claim 1 substantially as described with reference to and as shown in Fig. 1 or Fig. 2 of the drawings.

95 11. A method of making a decorative building feature which comprises subjecting strips of a deformable thermo-plastics sheet material to an embossing operation, placing the embossed strips in a mould and injecting  
100 into the mould a foamable plastics material and causing the foamable material to foam and to adhere to one surface of the embossed strip.

12. A method as claimed in claim 11, wherein the thermo-plastics material is polyvinyl chloride and the foamable material is a foamable polyurethane forming composition.

13. A method for making a decorative building feature as claimed in claim 1 which comprises blowmoulding a tube of thermo-plastics material to produce a decorative surface over one part of the surface of the tube and to form the required plane surfaces on other parts of the tube and fill the so-formed  
115 decorative tube with a support material.